SEQUENCE LISTING

(1) GENERAL INFORMATION:

APPLICANT: Olsen, et al.

(ii) TITLE OF INVENTION: Vascular Endothelial Growth Factor 3

(iii) NUMBER OF SEQUENCES: 6

(iv) CORRESPONDENCE ADDRESS:
(A) ADDRESSEE: CARELLA, BYRNE, BAIN, GILFILLAN, CECCHI, STEWART & OLSTEIN
(B) STREET: 6 BECKER FARM ROAD
(C) CITY: ROSELAND
(D) STATE: NEW JERSEY
(E) COUNTRY: USA
(F) ZIP: 07068

(v) COMPUTER READABLE FORM:
(A) MEDIUM TYPE: 3.5 INCH DISKETTE
(B) COMPUTER: IBM PS/2
(C) OPERATING SYSTEM: MS-DOS
(D) SOFTWARE: WORD PERFECT 5.1

(vi) CURRENT APPLICATION DATA:
(A) APPLICATION NUMBER: 08/469,641
(B) FILING DATE: June 6, 1995
(C) CLASSIFICATION:

(vii) ATTORNEY/AGENT INFORMATION:
(A) NAME: MULLINS, J.G.
(B) REGISTRATION NUMBER: 33,073
(C) REFERENCE/DOCKET NUMBER: 325800-463 (PF207)

(viii) TELECOMMUNICATION INFORMATION:
(A) TELEPHONE: 201-994-1700
(B) TELEFAX: 201-994-1744

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 666 BASE PAIRS
(B) TYPE: NUCLEIC ACID
(C) STRANDEDNESS: SINGLE
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```
ATGAGAAGGT GTAGAATAAG TGGGAGGCCC CCGGCGCCCC CCGGTGTCCC CGCCCAGGCC    60
CCTGTCTCCC AGCCTGATGC CCCTGGCCAC CAGAGGAAAG TGGTGTCATG GATAGATGTG   120
TATACTCGCG CTACCTGCCA GCCCCGGGAG GTGGTGGTGC CCTTGACTGT GGAGCTCATG   180
GGCACCGTGG CCAAACAGCT GGTGCCCAGC TGCGTGACTG TGCAGCGCTG TGGTGGCTGC   240
TGCCCTGACG ATGGCCTGGA GTGTGTGCCC ACTGGGCAGC ACCAAGTCCG GATGCAGATC   300
CTCATGATCC GGTACCCGAG CAGTCAGCTG GGGGAGATGT CCCTGGAAGA ACACAGCCAG   360
TGTGAATGCA GACCTAAAAA AAAGGACAGT GCTGTGAAGC CAGACAGGGC TGCTACTCCC   420
CACCACCGTC CCCAGCCCCG TTCTGTTCCG GGCTGGGACT CTGCCCCCGG AGCACCCTCC   480
CCAGCTGACA TCACCCAATC CCACTCCAGC CCCAGGCCCC TCTGCCCACG CTGCACCCAG   540
CACCACCAGT GCCCTGACCC CCGGACCTGC CGCTGCCGCT GTCGACGCCG CAGCTTCCTC   600
CGTTGTCAAG GGCGGGGCTT AGAGCTCAAC CCAGACACCT GCAGGTGCCG GAAGCTGCGA   660
AGGTGA                                                              666
```

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 221 AMINO ACIDS
(B) TYPE: AMINO ACID
(C) STRANDEDNESS:
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: PROTEIN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

```
Met Arg Arg Cys Arg Ile Ser Gly Arg Pro Pro Ala Pro Pro Gly
  5                  10                  15
Val Pro Ala Gln Ala Pro Val Ser Gln Pro Asp Ala Pro Gly His
            20                  25                  30
Gln Arg Lys Val Val Ser Trp Ile Asp Val Tyr Thr Arg Ala Thr
        35                  40                  45
Cys Gln Pro Arg Glu Val Val Val Pro Leu Thr Val Glu Leu Met
    50                  55                  60
Gly Thr Val Ala Lys Gln Leu Val Pro Ser Cys Val Thr Val Gln
65                  70                  75
Arg Cys Gly Gly Cys Cys Pro Asp Asp Gly Leu Glu Cys Val Pro
            80                  85                  90
Thr Gly Gln His Gln Val Arg Met Gln Ile Leu Met Ile Arg Tyr
        95                  100                 105
Pro Ser Ser Gln Leu Gly Glu Met Ser Leu Glu Glu His Ser Gln
    110                 115                 120
Cys Glu Cys Arg Pro Lys Lys Lys Asp Ser Ala Val Lys Pro Asp
125                 130                 135
Arg Ala Ala Thr Pro His His Arg Pro Gln Pro Arg Ser Val Pro
    140                 145                 150
Gly Trp Asp Ser Ala Pro Gly Ala Pro Ser Pro Ala Asp Ile Thr
155                 160                 165
Gln Ser His Ser Ser Pro Arg Pro Leu Cys Pro Arg Cys Thr Gln
    170                 175                 180
His His Gln Cys Pro Asp Pro Arg Thr Cys Arg Cys Arg Cys Arg
185                 190                 195
```

```
Arg Arg Ser Phe Leu Arg Cys Gln Gly Arg Gly Leu Glu Leu Asn
                200                 205                 210
Pro Asp Thr Cys Arg Cys Arg Lys Leu Arg Arg
                215                 220
```

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 29 BASE PAIRS
(B) TYPE: NUCLEIC ACID
(C) STRANDEDNESS: SINGLE
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: Oligonucleotide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GCATGATCC CAGCCTGATG CCCCTGGCC 29

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 30 BASE PAIRS
(B) TYPE: NUCLEIC ACID
(C) STRANDEDNESS: SINGLE
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: Oligonucleotide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GCATTCTAGA CCCTGCTGAG TCTGAAAAGC 30

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 29 BASE PAIRS
(B) TYPE: NUCLEIC ACID
(C) STRANDEDNESS: SINGLE
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: Oligonucleotide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

GACTGCATGC ACCAGAGGAA AGTGGTGTC 29

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 29 BASE PAIRS
(B) TYPE: NUCLEIC ACID
(C) STRANDEDNESS: SINGLE
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: Oligonucleotide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GACTAGATCT CCTTCGCAGC TTCCGGCAC 29

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: AMINO ACIDS
(B) TYPE: AMINO ACID
(C) STRANDEDNESS:
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: PROTEIN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

Pro Xaa Cys Val Xaa Xaa Xaa Arg Cys Xaa Gly Cys Cys Asn
5 10

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS
(A) LENGTH: 231 AMINO ACIDS
(B) TYPE: AMINO ACID
(C) STRANDEDNESS:
(D) TOPOLOGY: LINEAR

(ii) MOLECULE TYPE: PROTEIN

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu
5 10 15
Leu Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala
20 25 30
Glu Gly Gly Gly Gln Asn His Glu Val Val Lys Phe Met Asp Val
35 40 45
Tyr Gln Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile
50 55 60
Phe Gln Glu Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser
65 70 75

```
Cys Val Pro Leu Met Arg Cys Gly Gly Cys Cys Asn Asp Glu Gly
                 80                  85                  90
Leu Glu Cys Val Pro Thr Glu Glu Ser Asn Ile Thr Met Gln Ile
                 95                 100                 105
Met Arg Ile Lys Pro His Gln Gly Gln His Ile Gly Glu Met Ser
                110                 115                 120
Phe Leu Gln His Asn Lys Cys Glu Cys Arg Pro Lys Lys Asp Arg
                125                 130                 135
Ala Arg Gln Glu Lys Lys Ser Val Arg Gly Lys Gly Lys Gly Gln
                140                 145                 150
Lys Arg Lys Arg Lys Lys Ser Arg Tyr Lys Ser Trp Ser Val Tyr
                155                 160                 165
Val Gly Ala Arg Cys Cys Leu Met Pro Trp Ser Leu Pro Gly Pro
                170                 175                 180
His Pro Cys Gly Pro Cys Ser Glu Arg Arg Lys His Leu Phe Val
                185                 190                 195
Gln Asp Pro Gln Thr Cys Lys Cys Ser Cys Lys Asn Thr Asp Ser
                200                 205                 210
Arg Cys Lys Ala Arg Gln Leu Glu Leu Asn Glu Arg Thr Cys Arg
                215                 220                 225
Cys Asp Lys Pro Arg Arg
                230
```